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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/607,294	06/30/2000	Richard L. Ponziani	VAL 133 P2	9779

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EXAMINER

COLE, LAURA C

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/607,294

Applicant(s)

PONZIANI, RICHARD L.

Examiner

Laura C Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 30-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 24, 25, 27-29 and 50-63 is/are rejected.
- 7) ☒ Claim(s) 22, 23 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the direction arrow 'B' in figure 9 (Page 9, Lines 28-29). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:
It appears if Applicant has not completed their thought on Page 6 Lines 16-17.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-4, and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "said drive latch" in Line 2 of Claim 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites a "resilient detent comprises at least one spring-loaded ball" which is unclear since it "cooperates" with the detent (Page 6 Lines 19-30).

Claim 7 is indefinite and unclear. How does a wiper blade comprise torque?
How does a resilient detent comprise a torque? How does a motor comprise torque?
This torque does not appear to be developed from any associated means, therefore is
found confusing and unclear.

4. Claims 5-6 are rejected under 35 U.S.C. 112, second paragraph, as being
indefinite for failing to particularly point out and distinctly claim the subject matter which
applicant regards as the invention.

Claim 5 recites the limitation "said drive latch" in Line 3 of Claim 5. There is
insufficient antecedent basis for this limitation in the claim.

5. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite
for failing to particularly point out and distinctly claim the subject matter which applicant
regards as the invention.

Claim 21 recites a "resilient detent comprises at least one spring-loaded ball"
which is unclear since it "cooperates" with the detent (Page 6 Lines 19-30).

6. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite
for failing to particularly point out and distinctly claim the subject matter which applicant
regards as the invention.

Claim 24 is indefinite and unclear. How does a wiper blade comprise torque?
How does a resilient detent comprise a torque? How does a motor comprise torque?
This torque does not appear to be developed from any associated means, therefore is
found confusing and unclear.

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7. Claims 51-53, and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 51 recites the limitation "said drive latch" in Line 2 of Claim 51. There is insufficient antecedent basis for this limitation in the claim.

Claim 53 recites a "resilient detent comprises at least one spring-loaded ball" which is unclear since it "cooperates" with the detent (Page 6 Lines 19-30).

Claim 56 is indefinite and unclear. How does a wiper blade comprise torque? How does a resilient detent comprise a torque? How does a motor comprise torque? This torque does not appear to be developed from any associated means, therefore is found confusing and unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on-sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1-3, 8, 9, 11-14, 18-20, 25, 27-29, 50-52, 57, 58, and 60-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Litchfield et al., GB 1,448,892.

Litchfield et al. discloses improvements to window wipers that comprises a wiper arm window latch system comprising a wiper arm (Figure 4 (28)), a drive motor for driving the wiper arm (Figure 7 (49); Column 3 Lines 43-46), a drive coupler or "latch release" (comprising a driven gear wheel (41)) that couples the wiper arm to the drive motor in order to latch the window to a door (Page 1 Lines 10-27), the drive latch comprises a receiver for receiving the end of the wiper arm (Figure 4 (80)), a lock associated with the receiver for locking the wiper arm to the receiver (Figure 4 (57) and (62)), the lock having a resilient detent (Figure 4 (62) wherein detent is defined as a "catch or lever that locks the movement of one part of a mechanism" in The American Heritage® Dictionary of the English Language, Fourth Edition, Copyright © 2000 by Houghton Mifflin Company) that cooperates with a groove (Page 3 Line 116 to Page 4 Line 3), the drive coupler is located on the end of an output shaft (comprising a driven gear wheel (41)) and/or could be located at the end of the wiper blade (portion where (61) is located in Figure 4), the wiper arm comprises an end for receipt in the drive coupler in order for the end to be snap fit (Figure 4 teeth (61) and (80) "snap" together), the end is "generally" conical (inverted), a controller is coupled to the drive motor for controlling the operation of the drive motor (Page 3 Lines 71-80), the drive coupler comprises a spring for biasing the insert end of a wiper arm away from the drive coupler

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to thrust into an open position (Page 3 Lines 47-70). The latch release may be a spring actuated cam lock (Figure 4 (62) and (68)) that has a resilient detent (Figure 4 (62)).

9. Claims 1 and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Kilker, USPN 5,847,519.

Kilker discloses a multi-functional apparatus for a wiper and cable drive that comprises a wiper arm (Figure 3 (127)), a drive motor (Figure 3 (43)) and a drive coupler for coupling the wiper arm to a drive motor (Figure 2 (53)).

10. Claims 1-3, 8-9, 14, 18, 25, 50-52, and 57-58 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 365,603.

'603 discloses improvements to wind screen wipers that comprise a wiper arm (Figures 1-2 (l)), a drive motor (Figures 1-2 (a)), a drive coupler (Page 2 Lines 20-34), a receiver for receiving an end of the wiper arm and a lock associated with it for locking the wiper arm onto the receiver (Figures 1 and 2; Page 2 Lines 25-29, as it "locks" when engaged), and a detent (h) cooperates with "grooves" (shoulders of (f)), the coupler (g) and (h) is located on the end of the wiper blade and on an output shaft (Figure 1), wherein there is a spring for biasing (Page 2 Lines 34-42).

11. Claims 1, 2, 5, 6, 15, 16, 50, 51, 54, 55, and 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Tilli et al., USPN 5,907,885.

Tilli et al. discloses a multi-functional apparatus for use in an automotive vehicle that comprises a wiper arm window latch system comprising a wiper arm (Figure 1 (31)), a drive motor for driving the wiper arm (Figure 1 (13)), a drive coupler for coupling the wiper arm to the drive motor in order to latch the window to a door (Figure 1; (45)

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corresponds to a latch and (47) corresponds to a lock; the coupler; the coupler is the "system" shown in Figure 1, especially the worm gear (21)). Tilli et al. further discloses a "receiver" (Figure 1 (29) is "received" on a link that is connected to a shaft (15) and worm gear (21)), a drive latch comprising a cam member that cooperates with the wiper latch (Figure 4 (103) acts as a cam along surfaces (39) and (41) to actuate the latch; Column 5 Line 55 to Column 6 Line 4), a cam wall (Figure 4 (39) and (41)) drives the wiper blade to an open position to unlock the window (Column 5 Line 55 to Column 6 Line 4), at least one spring loaded ball (Figure 18 pin (49) has a spring loaded head that is appears as a "ball shape" (77); Column 6 Lines 28-32), and a mechanical stop (as the track formed by walls (39) and (41) end and by contact with (45) and (47)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tilli et al., USPN 5,907,885 in view of Papazian et al., USPN 5,559,410.

Tilli et al. discloses all elements above, however does not disclose a stop of a software algorithm.

Papazian et al. discloses a device for powering an electric motor of a windshield wiper that has a controller and position sensors (Abstract.) Also, the wiper is stopped in a predetermined position due to the controller by an algorithm (Column 1 Lines 46-56).

It would have been obvious to one of ordinary skill in the art to modify Tilli et al. to use a controller to program a stop of a software algorithm as Papazian et al teaches so as to preserve the wiper blade and to allow the wiper to move in a consistent path not blocking the driver's vision.

Allowable Subject Matter

13. Claims 4, 7, 21, 24, 53, and 56 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

14. Claims 22, 23, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 6,493,900 and USPN 6,240,593 disclose a vehicle wiper device that is used on the rear of the vehicle and include coupling systems, latch, and a door lock.

The priority date of this application prevents the prior art from being applied.

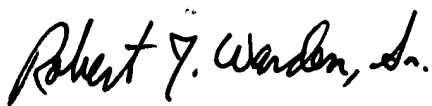
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (703) 305-7279. The examiner can normally be reached on Monday-Thursday, 7am - 4:30pm, alternating Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8772 for regular communications and (703) 873-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LCC
LCC
April 14, 2003


ROBERT J. WARDEN, SR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700